



NATIONAL ASSOCIATION OF THE DEAF

814 THAYER AVENUE • SILVER SPRING, MARYLAND • 20910-4500
HEADQUARTERS: 301-587-1788 VOICE • 301-587-1789 TTY • 301-587-1791 FAX
BOOKSTORE: 301-587-6282 VOICE • 301-587-6283 TTY • 301-587-4873 FAX

September 10, 1996

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

Re: In the Matter of Revision of the Commission's
Rules To Ensure Compatibility with Enhanced
911 Emergency Calling Systems

Dear Mr. Caton:

Enclosed please find an original and nine copies of the reply comments in the above captioned proceeding submitted by the National Association of the Deaf.

I would appreciate your referring all correspondence regarding this matter to my attention.

Sincerely,

Karen Peltz Strauss
Legal Counsel for Telecommunications Policy

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

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OFFICE OF SECRETARY

In the Matter of)	
)	
Revision of the Commission's Rules)	CC Docket No. 94-102
To Ensure Compatibility with)	RM-8143
Enhanced 911 Emergency Calling Systems)	

**REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF THE DEAF**

Karen Peltz Strauss
Legal Counsel for Telecommunications Policy
National Association of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910-4500
(301) 587-1788 (V)
(301) 587-1789 (TTY)

September 10, 1996

SUMMARY

The current proceeding is designed to ensure that individuals using wireless telecommunications services will have the same access to 911 basic and enhanced emergency services as do persons using wireline services. Both the Americans with Disabilities Act and the Telecommunications Act of 1996 mandate that individuals with disabilities also have full and complete access to 911 emergency systems. In particular, deaf and hard of hearing individuals who use TTYs must have the same assurances that they will be able to benefit from the increased accuracy and reliability that automatic number identification and automatic location identification have to offer all Americans using emergency services. Moreover, other new technologies, including the ability to interrupt a TTY conversation, voice and hearing carryover, the high speed transmission of TTY text, and direct connect capability between wireless telephones and TTYs should become mandated 911 features. Such action would be consistent with the Commission's stated goal of ensuring that E911 system performance keep pace with the newest technologies.

TABLE OF CONTENTS

I. TTY Access to 911 Systems	2
II. ALI/ANI Capabilities via TTYs	2
III. State-of-the-Art Technologies for TTY Callers	4
Speed in transmission of text	4
Ability to interrupt and inject a point	5
Voice carryover and hearing carryover	6
Direct connect capability	6
IV. Consumer Education for Deaf and Hard of Hearing Persons	8
V. Conclusion	9

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**REPLY COMMENTS OF
THE NATIONAL ASSOCIATION OF THE DEAF**

The National Association of the Deaf ("NAD") submits these reply comments in response to the Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 94-102 (released July 26, 1996) ("Order/NPRM") in which the Federal Communications Commission ("FCC" or "Commission") is addressing matters relating to access to enhanced 911 emergency calling systems.

The NAD is the nation's largest organization safeguarding the accessibility and civil rights of 28 million deaf and hard of hearing Americans in education, employment, health care, and telecommunications. The NAD is a private, non-profit federation of 51 state association affiliates including the District of Columbia, organizational affiliates, and direct members. The NAD seeks to assure a comprehensive, coordinated system of services that is accessible to Americans who are deaf and hard of hearing, enabling them to achieve their maximum potential through increased independence, productivity, and integration.

I. TTY Access to 911 Systems

The Commission's Order recognizes the importance of being able to fully access E911 emergency calling systems via wireless services. Acknowledging the widespread growth in the use of cellular telephones in the United States, the Commission's Order confirms that a significant majority of cellular telephone users purchase those telephones with the explicit purpose of having the safety and security of a communications link in the event of an emergency. Order/NPRM ¶6. The Commission recognizes as well that consumers who use text telephones ("TTYs") for access to wireless services want the same type of security in knowing that they can swiftly and efficiently access emergency telephone services via 911. Accordingly, the Commission has required that wireless services be capable of transmitting 911 calls from persons with hearing or speech disabilities through TTYs and means other than mobile radio handsets. We applaud the Commission's action in this regard, and see such action as fully consistent with the mandate of Title II of the Americans with Disabilities Act, which requires all 911 emergency systems to be accessible to TTY callers. The one year period which the FCC provides for licensees to achieve this access will allow sufficient time in which to resolve any technical issues which may currently impede such access. We are optimistic that within that time, the industries will be able to develop standards that will allow interface between TTYs and digital wireless systems.

II. ALI/ANI Capabilities via TTYs

The Commission's Order repeatedly emphasizes the importance of ultimately ensuring the use of enhanced 911 features (E911) including Automatic Location Identification ("ALI") and Automatic Number Identification ("ANI") when calls are initiated to 911 centers through mobile services. Indeed, a considerable portion of the Commission's Order is devoted to the problem of technical issues that need to be resolved to enable PSAPs to locate mobile callers in emergency

situations. See e.g. Order/NPRM ¶ 135. The FCC notes as well that parties commenting on its original Notice in this proceeding had urged the Commission to ensure that the advantages of E911 are available equally to all callers, including TTY users. Order/NPRM ¶48. In response, the Commission has suggested that the wireless industry, equipment manufacturers, PSAPs, and the disabled community explore these issues to determine the extent to which there is a problem in utilizing ANI and ALI with TTYs. Specifically, the Commission has directed signatories to an existing Consensus Agreement to report back to the Commission within one year on the extent to which incoming TTY calls are properly and promptly identified by PSAPs and the extent to which ANI and ALI are initiated before TTY calls are transferred to TTY stations by the PSAPs. While the NAD had not been a party to the consensus agreement, our members have a critical stake in the outcome of these issues.. Accordingly, the NAD is both willing and interested in participating in any further discussions and efforts designed to resolve these issues.

Moreover, the NAD urges the Commission to follow up on the industry/consumer report it has requested in this Order, by taking whatever action is needed to ensure that TTY callers receive the same benefits from ALI and ANI features as do other callers to 911 emergency systems. The Commission itself has emphasized that ALI capability permits rapid response in situations where callers are disoriented, disabled, unable to speak, or do not know their location. Order/NPRM ¶ 5. For deaf, hard of hearing, or speech impaired callers, ALI and ANI are not only helpful, they can often make the critical difference between life and death in an emergency situation.

Since 1992, the ADA has required all state and locally operated 911 systems to be accessible to TTYs. While progress has been made toward this goal, many emergency systems throughout the country remain inaccessible to deaf callers. Often 911 personnel are simply not

familiar with the method by which they must handle TTY calls; frequent turnover in personnel staff further aggravates this situation. The consequence is that all too often, 911 personnel, not hearing a voice at the other end of the call, simply hang up on TTY emergency callers. Where ALI and ANI have been used to receive wireline calls from TTY callers, these features have proven effective in providing quick and efficient responses from PSAPs. Among other things, with these enhanced services, 911 personnel have had immediate information as to whether the caller is deaf or hard of hearing. This has alerted the 911 dispatcher to use a TTY, eliminating the time wasted trying to establish voice contact with the caller.

III. State-of-the-Art Technologies for TTY Callers

Comments to the FCC's NPRM in this proceeding submitted by Telecommunications for the Deaf, Inc. ("TDI") requested assurances that PSAPs would be required to provide other basic features critical to ensure speedy responses to TTY callers utilizing mobile services. In response, the Commission has stated "[w]hile these proposals may have merit, the record in this proceeding does not show that TDI's proposals are feasible" Order/NPRM ¶53. The NAD wishes to address each of these features in turn, to demonstrate that each is not only feasible, but has already had applications that can easily be transferred to the 911 setting.

Speed in transmission of text - It is readily apparent that the effectiveness of accessing help in an emergency situation will depend upon the speed with which an emergency call is handled by a 911 emergency center. It was for this very reason that Congress, in the ADA, directed state and local governments to provide direct access by TTYs to police, fire, ambulance, and other emergency telephone services, rather than permit these calls to be channeled through telecommunications relay centers. See H.R. Rep. No. 485, Part 2, 101st Cong., 2d Sess. 84-85 (1990); Con. Rep. 596, 101st Cong., 2d Sess. 67-68 (1990). In implementing that requirement,

the Department of Justice has made clear that because of the added time needed to relay a telephone call, local governments cannot depend on relay services to handle emergency calls in their communities. 28 C.F.R. §35.162. Yet a TTY call coming in to a 911 center will not be handled effectively if the personnel assigned to handle that call has minimal or no typing skills. Nor can a TTY call be handled effectively if the individual handling the emergency call has no familiarity with TTY usage.

Presently, relay providers typically require their communications assistants to maintain a minimum typing speed when responding to relay calls. For more compelling reasons it is critical to ensure that personnel assigned to emergency TTY calls be capable of typing at a minimum speed of 60 words per minute in order to handle these calls swiftly and efficiently. There are no technical obstacles to such a requirement and this is consistent with the Commission's emphasis on the need to improve the speed at which emergency information can be delivered. See Order/NPRM ¶134.

Ability to Interrupt and Inject a Point - Presently, most TTYs operate in the half-duplex mode, only permitting conversation to take place in one direction at a time. However, recent technological developments have resulted in the creation of an "interrupt" feature on TTYs which allows one party to a TTY conversation to interrupt another. This is accomplished by one party simply pressing the interrupt button; the receiving party is then alerted through a light and an "interrupt" message that he or she should stop typing and receive the incoming message. The ability to interrupt a TTY incoming message and interject a point or a question is invaluable in an emergency situation, especially where 911 personnel are attempting to direct the caller through life-saving instructions.. The feasibility of the interrupt feature has already been demonstrated in daily conversations between TTY users.

Voice Carryover and Hearing Carryover - Voice carryover enables deaf and hard of hearing individuals who typically use their voices to talk directly to a hearing party and receive the hearing party's message in text via the TTY. Similarly, with hearing carryover, individuals with speech disabilities can type their messages but hear the other party's conversation. Both of these features are in widespread use and in fact are required in all relay centers under the Commission's rules. 47 C.F.R. §64.604. Their feasibility have been proven and the increased speed with which calls can be completed when they are employed is reason enough to require their application in 911 settings.

Direct Connect Capability - In its comments to the Commission, TDI had requested a requirement for the telephone industry to offer mobile units with an RJ11 jack for direct input by TTYs. This is because currently the configuration and size of most cellular telephones cannot be used with the acoustic cups of TTYs.

Cellular telephones already contain various input/output ports to hook up to other telecommunications devices, such as computers and fax modems. At times, connecting to these other devices may require a small adapter or connecting cable. To the extent that industry is reluctant to add an RJ11 jack on cellular telephones (presumably because of the large size of these jacks), we urge, at a minimum, that industry be required to make available with each cellular telephone, whatever adapter is needed to complete the connection between the input/output port on the mobile phone and the TTY (i.e. this may entail a connection to an RJ11 jack on a free-standing TTY or to a two-way infrared port used by computers that fulfill TTY functions). Because this adapter would be required to connect TTYs to wireless services through these phones, and because it would not be an optional feature in the same way that connections to modems are optional, we also urge that the FCC prohibit imposing the cost for such adapters on

TTY users. Such a result is, indeed, mandated by Section 255 of the Telecommunications Act of 1996, which requires access by persons with disabilities to all telecommunications equipment and services.

With respect to the above proposals, the Commission has stated that it intends to initiate a proceeding to implement the provisions of Section 255, and seems to suggest that it will consider these matters in conjunction with guidelines promulgated pursuant to that section by the Architectural and Transportation Barriers Compliance Board. Order/NPRM ¶53. We strongly maintain, however, that, given the specificity of 911 situations, the instant proceeding is the appropriate one in which to address these accessibility issues. This is especially true when considering the approach that the FCC currently intends to take with regard to its proposed rules under Section 255. Those rules are likely to be process-oriented only, and not require specific technologies to be employed to achieve access for persons with disabilities. In contrast, the instant proceeding's emphasis on ensuring that the latest technologies are utilized in 911 situations makes it the perfect forum in which to ensure that TTY users also receive the benefits of these state-of-the-art technologies.

In its effort to ensure that covered carriers implement state-of-the-art communications technology for E911 services as it becomes available, the Commission has proposed reporting requirements under which covered carriers would keep the Commission informed about these new technologies. The Commission has also proposed that it require carriers to deploy such technologies when their benefits exceed their costs. Order/NPRM ¶143. We support reporting and deployment mandates along these lines, and urge, that as part of the reporting requirement, carriers be required to report on technological developments that would improve access to E911 by individuals who are deaf, hard of hearing, or who have other communications disabilities. We

agree with the Commission that it is imperative for E911 system performance to keep pace with the latest technologies, Order/NPRM ¶13, and urge that where such technologies can benefit individuals with communication disabilities, they be required if readily achievable, pursuant to the 1996 Telecommunications Act.

IV. Consumer Education for Deaf and Hard of Hearing Persons

The FCC seeks comment on the scope of a consumer education program that would inform the public of the capabilities and limitations of mobile telephone units in connection with 911 services. The Commission proposes that covered carriers be required to inform customers on the scope of wireless services which are available via mobile handsets, including any technical limitations their wireless services may currently have concerning access to basic and E911 services. Order/NPRM ¶150. The Commission asks for comment on the need for equipment labeling or detailed service descriptions in this regard. Order/NPRM ¶151.

The NAD supports consumer education requirements to alert individuals to situations where their calls may not be completed to 911 emergency systems via wireless services. In addition, the NAD urges the FCC to adopt a requirement to alert TTY users as to any limitations that may exist in accessing emergency assistance over wireless services. These consumer information mandates can be fulfilled, for example, through the dissemination of materials via packaging inserts, media announcements, and newspaper notices. However such information is provided, the FCC should ensure that it be provided in accessible formats for individuals with disabilities. Such formats can include, for example, captioning and video description of public service announcements, as well as large print materials. In the event that information is disseminated via public meetings, such meetings should ensure the presence of sign language interpreters and computer aided transcription services, upon request. Moreover, where

information is disseminated via publications in newspapers and magazines, requirements should be in place to ensure that publications circulated among individuals with disabilities are included in the channels of distribution for this information.


The Commission also seeks comment on the role that local public safety agencies can play in disseminating information regarding the capabilities and limitations of wireless 911 services. Order/NPRM ¶152. One way that that public safety agencies can play a role is through the preparation of billing inserts that can be distributed by local telephone companies with subscriber bills. Another may be through the use of community forums. Again, where such forums are held, care must be taken to ensure that they are fully accessible to individuals with disabilities, including individuals who are deaf and hard of hearing. Finally, through comprehensive training, state and local governmental agencies responsible for 911 services should ensure that the front line staff and management of 911 centers are fully acquainted with the limitations of wireless services, including any limitations that may apply to the receipt of TTY calls.

V. Conclusion

The FCC's stated purpose for this proceeding is to ensure that wireless customers will be able to benefit from the advanced emergency capabilities of E911 systems that are available to wireline customers.. Deaf and hard of hearing individuals who use TTYs must have the same assurances that they will be able to benefit from the increased accuracy and reliability that these advanced technologies offer. Both Title II of the Americans with Disabilities Act and Section 255 of the Telecommunications Act of 1996 require that these individuals have the same access to 911 emergency systems via wireless services that is enjoyed by the rest of the public.

We call upon the Commission to ensure full accessibility to both basic and enhanced 911 services for TTY calls made through wireless services, and thank the Commission for the opportunity to submit these views.

Respectfully submitted,

A handwritten signature in black ink, reading "Karen Peltz Strauss". The signature is written in a cursive, flowing style.

Karen Peltz Strauss
Legal Counsel for Telecommunications Policy
National Association of the Deaf
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Silver Spring, MD 20910-4500
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